

DRAFT EIR

for the

MATHILDA AVENUE BRIDGE REHABILITATION PROJECT SUNNYVALE, CALIFORNIA

State Clearinghouse Number:2006012030

CITY OF SUNNYVALE

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TABLE OF CONTENTS

EIR SUMMARY	S-1
A Summary Description of the Proposed Project	S-1
B Summary of Significant Environmental Impacts & Mitigation	S-2
C Alternatives	S-3
D Areas of Controversy	S-3
 SECTION 1. DESCRIPTION OF THE PROPOSED PROJECT	 1
1.1 Project Overview and Location	1
1.2 Project Purpose and Objectives	1
1.3 Detailed Project Description	5
1.4 Right-of-Way Requirements	8
1.5 Project Scheduling and Funding	8
1.6 Uses of the EIR	8
1.7 Consistency with Adopted Plans	9
 SECTION 2. ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION	 10
2.1 Transportation and Traffic	10
2.2 Land Use	19
2.3 Flooding and Hydrology	20
2.4 Hazardous Materials	22
2.5 Air Quality	24
2.6 Noise	27
2.7 Cultural Resources	33
2.8 Geology	34
2.9 Biological Resources	36
2.10 Visual and Aesthetics	40
2.11 Cumulative Impacts	49
 SECTION 3. ALTERNATIVES	 51
3.1 Introduction	51
3.2 No Project Alternative	52
3.3 Widen Mathilda Bridge to the West Alternative	52
3.4 Reduced Cross-Section Alternative	53
3.5 Realign Evelyn Avenue Alternative	54
3.6 Roundabout Alternative	54
3.7 Separate Pedestrian Overcrossing Alternative	56
3.8 Separate Pedestrian Undercrossing Alternative	58
 SECTION 4. PUBLIC & INTERAGENCY SCOPING, COORDINATION, MEETINGS	 61

SECTION 5. REFERENCES	63
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SECTION 6. EIR AUTHORS AND CONSULTANTS	64
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A P P E N D I C E S

Appendix A	Notice of Preparation
Appendix B	Responses to Notice of Preparation
Appendix C	Transportation & Traffic Impact Assessment
Appendix D	Hazardous Materials Report
Appendix E	Noise Study

L I S T O F T A B L E S

Table S-1	Summary Comparison of Alternatives	S-4
Table 1	Level of Service Definitions for Signalized Intersections	13
Table 2	Comparison of Peak-Hour Operations at Study Intersections	14
Table 3	Projected Change in Traffic Volumes on Neighborhood Streets	16
Table 4	Major Criteria Air Pollutants and Standards	25
Table 5	Measured Noise Levels	29
Table 6	Trees to be Removed by the Project	37
Table 7	Summary of Project's Public Involvement Process	61

L I S T O F F I G U R E S

Figure 1	Regional Location Map	2
Figure 2	Vicinity Location Map	3
Figure 3	Aerial of Project Area	4
Figure 4	Project Components	6
Figure 5	Existing Roadway Network	11
Figure 6	Photosimulation from Vicinity of Charles Avenue	47
Figure 7	Photosimulation looking South along Angel Avenue	48
Figure 8	Roundabout Alternative	55
Figure 9	Separate Pedestrian Overcrossing Alternative	57
Figure 10	Separate Pedestrian Undercrossing Alternative	59

EIR SUMMARY

for the

MATHILDA AVENUE BRIDGE

REHABILITATION PROJECT

A. SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The City of Sunnyvale (the “City”) proposes to rehabilitate the existing Mathilda Avenue bridge over Evelyn Avenue and the Caltrain railroad tracks. The 6-lane bridge is located on Mathilda Avenue between California Avenue on the north and Washington Avenue on the south. The existing bridge, which was constructed in 1965, has been determined by Caltrans to be “functionally obsolete”. The proposed rehabilitation, which is intended to correct the existing deficiencies and to improve access to Downtown Sunnyvale, will include:

- Widening of the bridge to accommodate shoulders & to improve ramp merges
- Replacement of the existing off-ramp from southbound Mathilda Avenue to westbound Evelyn Avenue with a new loop off-ramp in the southwest quadrant
- Construction of a cul-de-sac at the northerly end of Charles Avenue
- Reconstruction of the two pedestrian ramps that are located on the east side of the Mathilda Avenue overcrossing
- Horizontal realignment of Evelyn Avenue within the existing right-of-way in the vicinity of Mathilda Avenue
- A new traffic signal on Evelyn Avenue at the Mathilda Avenue off-ramp
- Reconstruction of sidewalks
- Implementation of aesthetic and landscaping improvements.

B. SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION

The proposed project was fully analyzed in the EIR. The following text summarizes all of the environmental impacts that were determined to be significant, as well as those measures that would avoid or mitigate the significant impacts. Per CEQA, impacts determined to be less-than-significant are not included in this summary.

Significant Environmental Impact	Mitigation & Avoidance Measures
Construction-Related Noise & Vibration	
During construction of the project, noise and vibration impacts will likely affect persons living in nearby residences located in the southwest and northeast quadrants.	The project includes six measures that will mitigate this impact, as listed in EIR Section 2.6. These measures include limitations on the hours of the day when pile driving and other construction activities can occur. [Less-than-Significant with Mitigation]
Biological Resources	
The project will result in the loss of approximately 34 trees, including 29 trees of "significant size" (defined by the City as those with circumferences of 38 inches or greater).	For each tree of "significant size" being removed by the project, replacement trees will be planted in the immediate project area. Locations for new trees will include both sides of Angel Avenue, the new parking area within the loop off-ramp, the bermed area on the outside of the loop off-ramp, and the median of Evelyn Avenue. [Less-than-Significant Impact with Mitigation]
Trees to be preserved could be harmed during project construction.	The project includes measures that will mitigate this impact, as listed in EIR Section 2.9. These measures include limitations on pruning and delineation of protection zones around the trees. [Less-than-Significant with Mitigation]
Construction activities could directly or indirectly harm nesting raptors.	Pre-construction surveys will occur. If active nests are found, buffers will be established under the direction of an ornithologist. [Less-than-Significant Impact with Mitigation]

Significant Environmental Impact	Mitigation & Avoidance Measures
Construction activities could directly or indirectly harm swallows that may be nesting on the bridge/ramp structures.	Old nests will be removed before swallows return. Pre-construction surveys will occur. Occupied nests will be avoided or removed in accordance with a permit to be obtained from the U.S. Fish & Wildlife Service. [Less-than-Significant Impact with Mitigation]
Visual & Aesthetics	
Existing trees in the project vicinity are an important visual/aesthetic resource. The removal of 34 of the trees by the project would constitute a significant visual and aesthetic impact.	Impacted trees will be replaced. New trees along Angel Avenue will be relatively large (48-inch box size) at the time of their planting to achieve a mature look quickly. Project will incorporate architectural and visual elements (see EIR Sections 1.3 and 2.10). Berming and landscaping will also be included. [Less-than-Significant Impact with Mitigation]

C. ALTERNATIVES

Section 3 of this EIR evaluates the environmental impacts of seven alternative to the proposed project, one of which is the No Project Alternative. The evaluation is summarized in Table S-1.

D. AREAS OF CONTROVERSY

The primary issue of concern raised during various public meetings and discussions on the proposed project is the potential loss of existing mature trees. The existing trees are considered an important visual, aesthetic, and biological resource in the area. As such, substantial effort has been devoted to designing the project to minimize tree loss, as well as evaluating alternatives that might result in the loss of fewer trees.

Another issue of concern is whether the project would increase noise levels in the adjacent neighborhoods. Various residents have stated that they are already impacted by cumulative noise from roadway traffic, Caltrain operations, and aircraft overflights, and that they are opposed to further increases in noise.

TABLE S - 1

SUMMARY COMPARISON OF ALTERNATIVES

	Proposed Project	No Project	Widen to the West	Reduced Cross-Section	Realign Evelyn Avenue Only	Round-about	Separate Pedestrian Over-crossing	Separate Pedestrian Under-crossing
Ability to Achieve Project Objectives	Meets all objectives	Meets none of the objectives	Alternative is not feasible; design standards cannot be met.	Alternative is not feasible; design standards cannot be met.	Corrects only one deficiency; meets none of the other objectives	Corrects existing deficiencies; minor improvement in Downtown access	Meets all objectives	Meets all objectives
Technically Feasible?	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Cost (millions)	\$ 14.4	\$ 0	n/a	n/a	\$ 0.4	\$ 19	\$ 15.5	\$ 18.2
Number of Trees to be Removed	34	0	n/a	n/a	0	57	26	27
Visual/Aesthetic Impacts	Significant, but will be mitigated	None	n/a	n/a	Negligible	Greater than proposed project	Similar to proposed project	Less than proposed project
Construction Noise	Significant, but will be mitigated	None	n/a	n/a	Less than proposed project	Similar to proposed project	Similar to proposed project	Greater than proposed project
Other Issues/Impacts							Would locate structure within 20' of residence at 360 Angel Avenue	Substantial nighttime construction; will require pedestrian path within Caltrain right-of-way.

SECTION 1. DESCRIPTION OF THE PROPOSED PROJECT

1.1 PROJECT OVERVIEW AND LOCATION

The City of Sunnyvale (the “City”) proposes to rehabilitate the existing Mathilda Avenue bridge¹ over Evelyn Avenue and the Caltrain railroad tracks. The 6-lane bridge is located on Mathilda Avenue between California Avenue on the north and Washington Avenue on the south, as shown on Figures 1 and 2. The existing bridge, which was constructed in 1965, includes two connector ramps between Mathilda and Evelyn Avenues. Figure 3 depicts an aerial view of the project area.

1.2 PROJECT PURPOSE AND OBJECTIVES

In 2000, the existing Mathilda Avenue bridge was determined by Caltrans to be "functionally obsolete", meaning that the bridge structure and ramps do not meet current design criteria with regard to motorized and non-motorized traffic operations and safety. The purpose of the proposed project is to rehabilitate this facility so that it meets current design standards, which in turn will improve operations and safety for motorists, bicyclists, and pedestrians.

The existing deficiencies include the following:

- There are no shoulders on the bridge.
- The sidewalk widths, barrier railings, and approach railings are inadequate.
- There is inadequate merging length between the ramp connectors and the main bridge.
- There is inadequate horizontal clearance between Evelyn Avenue and one of the columns that supports the Mathilda Avenue bridge. The column currently has no protective barrier due to insufficient clearance.
- The two pedestrian ramps do not meet the current Americans with Disabilities Act (ADA) design standards.

In addition to the basic objective of having a facility that meets current standards, the City desires a project design that improves access to Downtown Sunnyvale. This goal is in recognition of the importance of Mathilda Avenue as one of the City's major arterials and its function as a critical access route to the Downtown. It is currently difficult to access Downtown Sunnyvale from southbound Mathilda Avenue, especially during peak commute periods. Motorists heading to Downtown destinations must turn left at the Mathilda/Washington intersection. During peak commute periods, long queues in the left-turn lane can exceed the available capacity, a problem that is projected to worsen as the planned growth of the area is implemented.

¹Bridge Number 37C-0058.

Figure 1

Figure 2

Figure 3

1.3 DETAILED PROJECT DESCRIPTION

The primary components of the proposed project are shown on Figure 4 and are described as follows:

Rehabilitate Mathilda Avenue Bridge

The existing Mathilda Avenue bridge over Evelyn Avenue and the Caltrain tracks will be widened by approximately 25 feet at the widest point to provide safer merging/exiting and to accommodate 5-foot shoulders on the bridge and an 8-foot shoulder on the loop ramp. Widening will be less than the 25-foot maximum in locations where the acceleration and deceleration lanes taper. Widening will occur on both sides of the bridge. In addition, one or more existing bridge columns may be relocated.

Implement Connector Ramp Improvements

The existing off-ramp from southbound Mathilda Avenue to westbound Evelyn Avenue will be demolished. A new loop off-ramp to Evelyn Avenue from southbound Mathilda Avenue will be constructed, as shown on Figure 4. Motorists using the new off-ramp will be able to go either west or east on Evelyn Avenue.

Construct Charles Avenue Cul-de-Sac

The existing Charles Avenue/Evelyn Avenue intersection will be closed. The northerly end of Charles Avenue will terminate in a new cul-de-sac. The design of the cul-de-sac will provide access to/from the three driveways of the northernmost residences located on the west side of Charles Avenue.

Reconstruct Pedestrian Ramps

There are two pedestrian ramps on the east side of the Mathilda Avenue overcrossing. The pedestrian ramps provide a means for non-motorized traffic to cross the Caltrain tracks. These ramps will be reconstructed to meet the current ADA design standards.

Realign Evelyn Avenue

The horizontal alignment of Evelyn Avenue will be slightly shifted within the existing right-of-way in the vicinity of Mathilda Avenue. The shift will improve traffic operations and safety by improving the horizontal clearance between the roadway and one of the bridge columns.

Install Traffic Signal

A new traffic signal will be installed at the intersection of Evelyn Avenue and the new loop off-ramp. The signal will improve traffic operations and will safely accommodate left turns from the new ramp.

Figure 4

Reconstruct Sidewalks

A sidewalk along the westside of Mathilda Avenue, south of California Avenue, will be closed for through pedestrian traffic. A sidewalk along the eastside of Mathilda Avenue, between California Street and San Andreas Court, will be realigned and reconstructed. The eastside sidewalk will provide access for the pedestrian ramps.

Implement Aesthetic Improvements

The project includes new landscaping along Mathilda Avenue, as well as along Evelyn Avenue and within the new loop off-ramp to Evelyn Avenue from southbound Mathilda Avenue.² Within the new parking lot inside the new loop ramp, new plantings will consist of 27 Chanticleer (*Pyrus calleryana*) trees (15-gallon or larger) to provide seasonal color. Berming and Redwood (*Sequoia sempervirens*) trees (11 to 15-gallon or larger) on the outside of the loop ramp will soften the impact to residential areas nearby. The new plantings, along with the hardscaping, lighting, signage, and street furniture, will reinforce the pedestrian scale of the streetscape and help tie it into the new Town Center development immediately to the east. In order to further enhance the pedestrian character of the area, Evelyn Avenue will be downgraded from four traffic lanes to two, and expanded bike lanes will be constructed.³

In the northeast quadrant, a Woonerf-style treatment⁴ of San Andreas Court and the sidewalks will tie into the new pedestrian structure. Special treatment of San Andreas Court will include planters and pavers for the roadbed to give a pedestrian scale to this transition area. The pavers will continue on the sidewalk from San Andreas Court to the corner of Mathilda Avenue and California Avenue. On the west side of Angel Avenue, near the new pedestrian ramp, a minimum of four Redwood trees (48-inch box size) will be planted to achieve a mature look quickly, so as to minimize the effect of trees to be impacted. A minimum of four 48-inch box size Goldenrain (*Koelreuteria paniculara*) or Chinese Pistache (*Pistacia chinensis*) trees will also be planted along the east side of Angel Avenue across from the pedestrian structure to soften the impact on the existing residences. Finally, surface treatments, textures, and colors on the pedestrian and Mathilda Avenue structures will be included along Angel Avenue and San Andreas Court, which will create an aesthetic treatment to soften the new structures and create a pedestrian-scale space.

In the southeast quadrant, the new pedestrian structure will reflect the same surface treatments, textures, and colors of the other components of the project.

²New landscaping will be irrigated with an automatic system that is designed to conserve water.

³The downgrading of Evelyn Avenue is a separate project that is being implemented by the City.

⁴Woonerf (“street for living”) is a Dutch term for a common space created to be shared by pedestrians, bicyclists, and low-speed motor vehicles. They are often narrow streets that contain trees, planters, etc.

Special roadway treatment will be used at both ends of the Mathilda Avenue bridge for the purpose of distinguishing this approach into Downtown Sunnyvale. The special treatment will consist of contrasting colors and textures. The design of the Mathilda Avenue bridge itself will include an integrated approach to architectural surface treatments, railings, and lighting.

The design of the new off-ramp to Evelyn Avenue from southbound Mathilda Avenue will include architectural features that will convey its function as a primary entry point to the Downtown. This will involve some sort of vertical element with lighting that will be seen from both Mathilda and Evelyn Avenues.

1.4 RIGHT-OF-WAY REQUIREMENTS

The new off-ramp from southbound Mathilda Avenue to Evelyn Avenue will utilize land that is comprised of Assessor's Parcel Numbers (APN) 165-14-45 and 165-14-46. These parcels, which are approximately 1.2 acres in size, are owned by the City of Sunnyvale. The existing use on the parcels is a 117-space public parking lot.

A temporary construction easement (TCE) will likely be required from Applied Signal Technology, Inc. to allow for the widening of the bridge on the westside.

1.5 PROJECT SCHEDULE AND FUNDING

Construction of the proposed project is presently scheduled to commence in late 2006 or early 2007. Completion is anticipated in 2008.

Funding sources include the federal Highway Bridge Rehabilitation & Replacement (HBRR) program and the City of Sunnyvale.

1.6 USES OF THE EIR

The information contained in this EIR will be used by the City of Sunnyvale (the CEQA Lead Agency) as it considers whether or not to approve the proposed project.

In addition to the City of Sunnyvale, the Peninsula Corridor Joint Powers Board will use this EIR in conjunction with its role in the issuance of a permit for any work within the Caltrain right-of-way.

1.7 CONSISTENCY WITH ADOPTED PLANS

This section complies with CEQA Guidelines Section 15125(d), which requires an EIR to discuss any inconsistencies between the proposed project and applicable general plans and regional plans.

The proposed Mathilda Avenue Bridge Rehabilitation project is intended to improve operational and safety conditions for both motorized and non-motorized traffic in the project vicinity. This objective is consistent with the goals and policies of the *Sunnyvale General Plan*. Applicable goals and policies include the following:

Goal C3: Attain a transportation system that is effective, safe, pleasant, and convenient.

Policy C3.4: Maintain roadways and traffic control devices in good operating condition.

Policy C3.5: Support a variety of transportation modes.

Policy C3.7: Pursue local, state and federal transportation funding sources to finance City transportation capital improvement projects consistent with City priorities.

The proposed project is included in the Downtown Specific Plan, which was adopted by the City Council on October 14, 2003. It is also included in the August 2002 Downtown Design Plan.

SECTION 2. ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION

[Introductory Note: This section of the EIR describes the existing environmental setting at, and in the vicinity of, the Mathilda Avenue bridge in Downtown Sunnyvale, as well as the Project's impacts on that setting. Per the CEQA Guidelines, the discussions in this section focus on those subject areas which are germane to the Project and its setting. Subject areas not relevant to this Project (e.g., farmlands, population, and housing), are, therefore, not discussed.]

2.1 TRANSPORTATION AND TRAFFIC

The following discussion is based on a traffic analysis prepared by Fehr & Peers Associates, Inc. in April 2004. A copy of the traffic report is contained in Appendix C.

2.1.1 Existing Conditions

Existing Roadways

The existing roadways in the project area are shown on Figure 5 and are described as follows:

Mathilda Avenue is a major north-south arterial in the City of Sunnyvale that provides access to the U.S. 101 and State Route 237 freeways in the north, and I-280 and the City of Cupertino in the south. Within the project limits, Mathilda Avenue is a 6-lane facility with a posted speed limit of 45 mph.

Evelyn Avenue is a 4-lane roadway that extends in an east-west direction through the project area. It provides access between Downtown Sunnyvale and Downtown Mountain View. As a separate project, the City has funded, and is preparing the final design for, a project to downsize Evelyn Avenue to a 2-lane facility with bike lanes.

Washington Avenue is a 2- to 4-lane street that extends in an east-west direction from west of Bernardo Avenue to east of Sunnyvale Avenue.

Sunnyvale Avenue is a 2-lane north-south collector street that is parallel to, and east of, Mathilda Avenue. There is a short 4-lane segment at the Caltrain tracks.

California Avenue is a 2-lane street that extends in an east-west direction from just west of Mary Avenue to just east of Fair Oaks Avenue.

South Pastoria Avenue is a north-south 2-lane street whose northerly terminus is Evelyn Avenue. South of El Camino Real, Pastoria Avenue is known as Hollenbeck Avenue.

Figure 5

Frances Street is a 2-lane street that extends between Washington and Evelyn Avenues.

Charles Avenue is a 2-lane residential street that extends from Olive Avenue on the south to Evelyn Avenue on the north.

Existing Transit Service

Public transit in the project vicinity includes both rail and bus service. These services are summarized as follows:

Commuter rail service between San Francisco and Gilroy, known as Caltrain, is operated by the Peninsula Corridor Joint Powers Board (PCJPB). The Caltrain tracks pass under the Mathilda Avenue bridge that is the subject of this document. The Sunnyvale Caltrain Station is located in the immediate project area, just east of Mathilda Avenue, and includes a park-and-ride lot.

The Santa Clara Valley Transportation Authority (VTA) operates numerous bus routes throughout Santa Clara County. In the project area, various VTA bus routes utilize Mathilda Avenue, Evelyn Avenue, Washington Avenue, Sunnyvale Avenue, California Avenue, and Frances Street.

Existing Pedestrian and Bicycle Facilities

Sidewalks are currently provided along both sides of Mathilda Avenue, south of Washington Avenue and north of California Avenue.⁵ There is no sidewalk on the west side of the Mathilda Avenue bridge. However, there is a paved pedestrian path along the west side of the Mathilda Avenue bridge structure that extends south from California Avenue. The path crosses under the structure to the east side of Mathilda Avenue where it connects to the neighborhood to the east and to a pedestrian ramp that accesses a short segment of sidewalk on the east side of the Mathilda Avenue bridge. The sidewalk connects to another pedestrian ramp that provides access to the Caltrain station, Evelyn Avenue, and the Downtown area.

In the immediate project area, there are bike lanes on Sunnyvale Avenue, south of Evelyn Avenue. The City of Sunnyvale has identified Mathilda Avenue, Washington Avenue, Evelyn Avenue, and California Avenue within the project area for future bike lanes. As noted above, the City is currently finalizing the design for a funded project that will include the construction of bike lanes on Evelyn Avenue.

Existing Peak-Hour Traffic Operations

Existing AM and PM peak-hour operations were quantified at seven study intersections in the project area using a concept known as "level of service". As shown in Table 1, level of service (LOS) is a

⁵North of California Avenue, there is a short segment on the west side of Mathilda Avenue where the sidewalk has not been constructed, but there is sufficient room for pedestrians.

<p style="text-align: center;">T A B L E 1</p> <p style="text-align: center;">LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS</p>		
Level of Service	Description of Operations	Average Control Delay^a (seconds/vehicle)
A	Insignificant Delays: No approach phase is fully utilized and no vehicle waits longer than one red indication.	≤ 10
B	Minimal Delays: An occasional approach phase is fully utilized. Drivers begin to feel restricted.	> 10 to 20
C	Acceptable Delays: Major approach phase may become fully utilized. Most drivers feel somewhat restricted.	> 20 to 35
D	Tolerable Delays: Drivers may wait through no more than one red indication. Queues may develop but dissipate rapidly, without excessive delays.	> 35 to 55
E	Significant Delays: Volumes approaching capacity. Vehicles may wait through several signal cycles and long vehicle queues from upstream.	> 55 to 80
F	Excessive Delays: Represents conditions at capacity, with extremely long delays. Queues may block upstream intersections.	> 80
^a Average Control Delay includes the time for initial deceleration delay, queue move-up time, stopped delay, and final acceleration.		
Source: Transportation Research Board, 2000 Highway Capacity Manual.		

qualitative description of traffic flow that uses the letters A through F to describe operations. LOS is computed based upon a number of factors including the traffic demand, the number of traffic lanes, and traffic signal timing. The City of Sunnyvale has established LOS "D" as the minimum acceptable operating level for non-Congestion Management Program (CMP) intersections. LOS "E" is the minimum acceptable operating level for CMP intersections. None of the seven study intersections are CMP intersections.

The existing peak-hour levels of service for the study intersections are shown in Table 2. All of the study intersections are presently operating at good levels of service. It should be noted, however, that while overall levels of service are good, traffic on side streets and traffic making left-turns from Mathilda Avenue does experience delays greater than that shown in Table 2.

TABLE 2							
COMPARISON OF PEAK-HOUR OPERATIONS AT STUDY INTERSECTIONS							
Intersection	Peak Hour	Existing		Year 2020			
				No Project		With Project	
		Average Delay	LOS	Average Delay	LOS	Average Delay	LOS
Mathilda Avenue/ California Avenue	AM	11.9	B	19.4	B	19.8	B
	PM	15.1	B	27.9	C	29.7	C
Mathilda Avenue/ Washington Avenue	AM	16.6	B	32.7	C	27.1	C
	PM	15.9	B	53.1	D	51.1	D
Mathilda Avenue/ McKinley Avenue	AM	4.5	A	19.3	B	18.4	B
	PM	4.6	A	18.1	B	18.4	B
Evelyn Avenue/ SB Mathilda Off-Ramp	AM	intersection does not exist		intersection does not exist		7.8	A
	PM					14.5	B
Evelyn Avenue/ SB Mathilda On-Ramp	AM	1.4	A	2.8	A	5.4	A
	PM	1.3	A	3.1	A	4.0	A
Evelyn Avenue/ Mathilda Place	AM	1.5	A	5.9	A	6.8	A
	PM	1.5	A	4.1	A	5.3	A
Evelyn Avenue/ Frances Street	AM	5.5	A	9.1	A	9.7	A
	PM	6.5	B	13.3	B	14.1	B
Average delay per vehicle is expressed in seconds.							
LOS = Level of Service SB = Southbound							
Source: Fehr & Peers Associates 2004.							

2.1.2 Future (2020) Conditions without the Project

Since the proposed project is being designed to accommodate both existing and future demand, projected traffic volumes in the area were quantified using the City of Sunnyvale's traffic forecasting model. The model accounts for existing traffic, as well as traffic associated with planned land uses, including the recently approved *Downtown Specific Plan*.

By 2020, traffic volumes are projected to substantially higher than they are today. For example, PM peak-hour traffic volumes on Mathilda Avenue, south of California Avenue, are projected to increase

from 3,598 to 5,718. Similarly, AM peak-hour traffic volumes on Mathilda Avenue, south of California Avenue, are projected to increase from 3,309 to 5,666.

The effect of the projected increase in traffic on the peak-hour operations of the study intersections is shown in Table 2. The data in Table 2 show that, when compared to existing conditions, there will be an increase in the average delay per vehicle by 2020.

2.1.3 Future (2020) Conditions with the Project

Thresholds of Significance

For the purposes of this project, a transportation impact is considered significant if the project would:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency or the City of Sunnyvale for designated roads or highway;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in locations that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., from equipment);
- Result in inadequate emergency access;
- Result in inadequate parking capacity; or
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Traffic Circulation Impacts

The primary change in traffic circulation that will result from construction of the proposed project will be associated with the reconfiguration of the off-ramp from southbound Mathilda Avenue to Evelyn Avenue. Under existing conditions, traffic using this off-ramp can only head west on Evelyn Avenue. With the new off-ramp, motorists will have the choice of heading west or east on Evelyn Avenue. This will improve access to the Downtown since, under existing conditions, much of such traffic must wait at the signal to turn left onto Washington Avenue from Mathilda Avenue.

Table 2 shows the effect of the project on intersection operations, as compared to "No Project" conditions. The data indicate that there will be no degradation of level of service at any of the study intersections due to construction of the proposed project. **[Less-than-Significant Impact]**

Neighborhood Traffic Impacts

One element of the proposed project is the creation of a cul-de-sac on Charles Avenue just south of Evelyn Avenue (see Figure 4). This will have the effect of changing the circulation pattern on Charles Avenue and on the adjacent streets because the existing Evelyn Avenue/Charles Avenue intersection will be closed. The projected change in traffic volumes on Charles Avenue and on the adjacent streets is shown in Table 3.

T A B L E 3			
PROJECTED CHANGE IN TRAFFIC VOLUMES ON NEIGHBORHOOD STREETS			
	No Project	Project	Change
Charles Avenue	1,200	300	- 900
Florence Street	480	670	+ 190
Waverly Avenue	480	655	+ 175
Volumes are average daily traffic (ADT) for each street between Washington Avenue and Evelyn Avenue.			
Source: Fehr & Peers Associates, 2004.			

The substantial decrease in traffic on Charles Avenue will occur as a direct result of the closure of the Charles Avenue/Evelyn Avenue intersection. Some of the traffic that presently uses Charles Street is through traffic bound for the Downtown, much of which will divert to the new off-ramp from southbound Mathilda Avenue to Evelyn Avenue. Other vehicles will divert to the adjacent parallel streets, which are Florence Street, Waverly Avenue, and Pastoria Avenue. Florence Street and Waverly Avenue are neighborhood streets, while Pastoria Avenue is designated as a collector street.⁶

While the project will result in an increase traffic on Florence Street and Waverly Avenue, a daily volume of 650 to 670 vehicles is reasonable for a neighborhood street with front-on housing. Therefore, this increase in traffic would not constitute a significant impact. **[Less-than-Significant Impact]**

⁶A *collector* street is designed to carry traffic volumes that are higher than those typically found on neighborhood streets. As the name implies, this class of roadway collects traffic from multiple neighborhood streets and ultimately connects with larger streets (e.g., arterials, expressways, freeways, etc.).

Although the increase in traffic on Florence Street and Waverly Avenue will not be significant, the City will erect signs on Washington Avenue that direct vehicles to Pastoria Avenue in order to access Evelyn Avenue. Signs will also be provided on Evelyn Avenue to direct westbound vehicles to use Pastoria Avenue and the Mathilda Avenue southbound on-ramp from Evelyn Avenue to access Washington Avenue.

Off-Street Parking Impacts

The new loop off-ramp from southbound Mathilda Avenue to Evelyn Avenue will directly affect an existing parking lot on the southeast corner of Evelyn Avenue/Charles Avenue that is owned and operated by the City.⁷ This "Evelyn/Charles" parking lot contains 117 parking spaces, approximately 81 of which will be lost due to the project.

To assess the effect of the loss of 81 parking spaces, surveys of parking demand and parking supply were undertaken. Surveys of the Evelyn/Charles parking lot - the use of which is free-of-charge and without time limits - found that usage varied from a low of 15 vehicles in 1998 to a high of 77 vehicles in 2004. Based on these surveys, this analysis conservatively assumed that the peak "demand" for parking at the Evelyn/Charles lot is 80 vehicles.

Based on field observations and conversations with City staff, the primary users of this parking lot are Caltrain riders. Although the Caltrain parking lot and parking structure are closer to the train station than the Evelyn/Charles lot, the former require a \$1.50/day fee while the latter is free. Other users of the Evelyn/Charles lot are construction workers associated with the Downtown plaza project.

Assuming the demand for parking at the Evelyn/Charles lot is 80 spaces and that 36 spaces will remain after the loop off-ramp is constructed, the question is whether or not there is sufficient parking available at other nearby locations to accommodate the unmet demand of 44 spaces.

Since most of the current users of the Evelyn/Charles lot are Caltrain riders, the logical alternative to the Evelyn/Charles lot would be the Caltrain parking lot and parking structure. The existing Caltrain lot and garage contain approximately 500 parking spaces. A 2004 survey of the Caltrain facilities during the Downtown peak lunchtime period found 246 vacant spaces available for public use.⁸ Based on this survey, the unmet demand of 44 parking spaces could be easily accommodated at the Caltrain parking facilities.

Based on the above analysis, it is concluded that the loss of approximately 81 parking spaces at the Evelyn/Charles lot would not be a significant parking impact. **[Less-than-Significant Impact]**

⁷This parking lot is not part of the Downtown Parking Assessment District.

⁸These vacant spaces do not include any of the 62 spaces reserved for Murphy Square between 6:00 AM and 7:00 PM.

On-Street Parking Impacts

The project will result in the loss of approximately three of 14 on-street parking spaces along Agena Way. Parking in these spaces is prohibited between the hours of 2:00 AM and 8:00 AM.

The land use along Agena Way is residential, all of which have some off-street parking. Although the greatest parking demand associated with residences occurs at night when most residents are at home, overnight on-street parking along Agena Way is currently prohibited. In light of the fact that the residential uses have off-street parking and in light of the prohibition on overnight on-street parking, the loss of three on-street parking spaces would not be a significant impact. **[Less-than-Significant Impact]**

Pedestrian and Bicyclist Impacts

For the following reasons, the effects of the project on pedestrians and bicyclists will be beneficial:

- The project will rebuild the two existing pedestrian ramps to meet current design and Americans with Disabilities Act (ADA) standards. **[Beneficial Impact]**
- The widened Mathilda Avenue bridge will include 5-foot shoulders that will provide width for bicycle travel. **[Beneficial Impact]**

Traffic Impacts/Street Closures During Construction

Construction of the proposed project will occur in stages and will require temporary ramp closures and detours. These stages and their corresponding detours are as follows:

First Stage: The first stage will be the construction of the new loop off-ramp from southbound Mathilda Avenue to Evelyn Avenue. This work will require the permanent closure of the existing off-ramp from southbound Mathilda Avenue to westbound Evelyn Avenue. Traffic that would normally use the ramp will be detoured to westbound Evelyn Avenue via the following route: southbound on Mathilda Avenue to Washington Avenue; westbound on Washington Avenue to Pastoria Avenue; northbound on Pastoria Avenue to Evelyn Avenue. While this detour is in place, none of the study intersections will operate below LOS "C"; most will operate at LOS "A" or "B" (Fehr & Peers, 2004). **[Less-than-Significant Impact]**

Second Stage: After completion of the first stage, work on the east side of the Mathilda Avenue Overcrossing will commence. This will require the temporary closure of the existing on-ramp to northbound Mathilda Avenue from westbound Evelyn Avenue. Traffic that would normally use the ramp will be detoured to northbound Mathilda Avenue via the following route: westbound on Evelyn Avenue to Sunnyvale Avenue; northbound on Sunnyvale Avenue to California Avenue; westbound on California Avenue to Mathilda Avenue. While this detour is in place, none of the study intersections

will operate below LOS "D"; most will operate at LOS "A" or "B" (Fehr & Peers, 2004). [**Less-than-Significant Impact**]

2.1.4 Mitigation and Avoidance Measures for Transportation and Traffic Impacts

The above analysis concluded that the proposed project would not result in any significant transportation or traffic impacts. Therefore, no mitigation or avoidance measures are required.

Conclusion: The project will result in both beneficial and adverse transportation and traffic impacts. The adverse impacts will not be significant.

2.2 LAND USE⁹

2.2.1 Existing Land Use

The existing land uses in the vicinity of the Mathilda Avenue bridge are a mix of residential, commercial, office, and public uses.

Northeast Quadrant Residential neighborhood located along Angel Avenue, Beemer Avenue, San Andreas Court, Taaffe Street, and Frances Street.

Southeast Quadrant Sunnyvale Caltrain Station, as well as commercial and office uses that are part of the Downtown.

Northwest Quadrant Office/research and development (Applied Signal Technology, Inc. campus), and Sunnyvale Fire Station #1.

Southwest Quadrant Public parking lot and residential uses located along Charles Avenue, Florence Street, and Agena Way.

2.2.2 Land Use Impacts

Thresholds of Significance

For the purposes of this EIR, a significant land use impact will occur if the project would:

⁹For the purpose of describing land uses, the project area is broken in quadrants around the point where Evelyn Avenue and the Caltrain tracks pass under Mathilda Avenue.

- physically divide an established community; or
- place incompatible land uses adjacent to existing uses; or
- conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Land Use Impacts

The project would rehabilitate existing transportation infrastructure that is owned and operated by the City of Sunnyvale. The project would not require the acquisition or relocation of any residences or businesses, nor would it physically divide any existing neighborhoods. The project would not introduce an incompatible land use adjacent to an existing use. Finally, as discussed above in Section 1.7, the project is compatible with the adopted *Sunnyvale General Plan*. **[No Impact]**

2.2.3 Mitigation and Avoidance Measures for Land Use Impacts

The above analysis concluded that the proposed project would not result in any significant land use impacts. Therefore, no mitigation or avoidance measures are required.

Conclusion: The project will not result in adverse land use impacts.

2.3 FLOODING AND HYDROLOGY

2.3.1 Existing Conditions

There are no creeks or waterways within the project limits. The nearest water body is Stevens Creek, located approximately 1.5 miles to the west.

The project site is not located within any 100-Year Floodplains. The project impact area is urbanized and is almost entirely paved or covered with structures.

2.3.2 Flooding and Hydrology Impacts

Thresholds of Significance

For the purposes of this project, a hydrologic impact is considered significant if the project would:

- substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted); or
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site; or
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site; or
- create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or
- place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map; or
- place structures within a 100-year flood hazard area, such that flood flows would be impeded or redirected; or
- expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- be subject to inundation by seiche, tsunami, or mudflow.

Flooding and Hydrology Impacts

The project will not increase any potential for flooding as it is not located within a floodplain. **[No Impact]**

The amount of impervious surfaces in the area, which affects the volume of stormwater runoff, will not increase as a result of the project. This statement is based on the fact that any increase in impervious surface due to the widening of the Mathilda Avenue bridge will be offset by the removal of pavement (and its replacement with landscaping) in the area currently occupied by the parking lot on the corner of Evelyn and Charles Avenues. **[No Impact]**

2.3.3 Mitigation and Avoidance Measures for Flooding and Hydrology Impacts

The above analysis concluded that the proposed project would not result in any significant flooding or hydrological impacts. Therefore, no mitigation or avoidance measures are required.

Conclusion: The project will not result in adverse flooding or hydrology impacts.

2.4 HAZARDOUS MATERIALS

The following discussion is based on an Initial Site Assessment (ISA) prepared by Geocon Associates, Inc. in March 2004, and an Addendum to the ISA dated May 2004. A copy of the ISA (with Addendum) is contained in Appendix D.

2.4.1 Introduction and Methodology

The purpose of preparing an ISA is to identify areas within or adjacent to the Mathilda Avenue Overcrossing where there is existing contamination from hazardous materials and/or where there is a likelihood that such contamination may be present. The reason for this research is to alert the public and governmental agencies to these contaminated areas so that future problems associated with exposure to hazardous materials can be avoided. A secondary, but important, reason for this research is to alert officials who are considering the purchase of property to existing and/or potential contamination, since property owners can be held responsible for the cost of cleanup in many cases.

The methodology used in the ISA consists of checking with governmental regulatory agencies for records of contamination and land uses (existing and prior) that may use or store hazardous materials. These agencies included the following: EPA, California Department of Health Services, California Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board (RWQCB), Santa Clara Valley Water District (SCVWD), and the Sunnyvale Public Safety Department. Historical use of the project area was also investigated by examining Sanborn Fire Insurance Rate Maps dating from 1915 to the present. Finally, a surface inspection of the area was conducted.

2.4.2 Existing Conditions

A number of properties where hazardous materials contamination has occurred are located in proximity to the project site. The type of contamination and the potential for impacts to the project are described as follows:

Sunnyvale Fire Station #1 This site is located on the southwest corner of Mathilda Avenue and California Avenue, at the north end of the project limits. A leaking underground storage tank (LUST) that contained diesel fuel was removed from the site in 1984. Remediation of some of the soil contamination due to this leak has occurred and groundwater monitoring wells were installed. It was determined that the direction of groundwater flow is north to northeast. A case closure letter was issued by the Santa Clara Valley Water District (SCVWD) in 1995.

Based on the above information, any residual contamination associated with the former LUST at the fire station will not adversely affect the project.

Sunnyvale Business Park The site, 444 California Avenue, is located more than 300 feet west of the project. A LUST was removed from the site in 1990 and minor soil contamination was found to have

occurred. The contamination is cross-gradient from the project site. A case closure letter was issued by the Regional Water Quality Control Board (RWQCB) in 1995.

Based on the above information, any residual contamination associated with the former LUST at the Sunnyvale Business Park will not adversely affect the project.

Broadcom/former Mobil Station The site, 205 South Mathilda Avenue, is located at the southwest corner of Washington Avenue and Mathilda Avenue. A LUST was removed from the site in 1984. In 1999, groundwater samples collected downgradient of this site did not detect any contamination.

Based on the above information, any residual contamination associated with the former LUST at the Broadcom site will not adversely affect the project.

The project will not involve excavation or grading within the Caltrain/railroad right-of-way. Therefore, the ISA did not evaluate conditions within that property.

2.4.3 Hazardous Materials Impacts

Thresholds of Significance

For the purposes of this EIR, a hazardous materials impact is considered significant if the project would:

- create a significant hazard to the public or the environment as a result of the routine transport, use or disposal of hazardous materials; or
- create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school; or
- create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site to contamination in excess of soil and groundwater cleanup goals developed for the site.

Hazardous Materials Impacts

Based on the information described above in Section 2.4.2, there are no existing or suspected sources of hazardous materials contamination in the area that could adversely affect either construction workers or users of the Mathilda Avenue bridge. **[No Impact]**

The project will improve operational and safety conditions for motorized traffic. These improvements will benefit all vehicles, including those (e.g., gasoline tanker trucks) that routinely haul hazardous materials.

2.4.4 Mitigation and Avoidance Measures for Hazardous Materials Impacts

The above analysis concluded that the proposed project would not result in any significant hazardous materials impacts. Therefore, no mitigation or avoidance measures are required.

Conclusion: The project will not result in adverse hazardous materials impacts.

2.5 AIR QUALITY

2.5.1 Introduction and Regulatory Framework

Air pollution typically refers to air that contains chemicals in concentrations that are high enough to cause adverse effects to humans, other animals, vegetation, or materials. Air pollutants include those from natural sources (e.g., forest fires, volcanic eruptions, windstorms, etc.) and human sources (e.g., factories, transportation, power plants, etc.). In the Santa Clara Valley, vehicular emissions are the predominant source of air pollutants.

In recognition of the adverse effects of degraded air quality, Congress and the California Legislature enacted the Federal and California Clean Air Acts, respectively. As a result of these laws, the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for what are commonly referred to as “criteria pollutants”, because they set the criteria for attainment of good air quality. Criteria pollutants include carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, and particulate matter. In general, the California standards are more stringent than the federal standards. Table 4 lists these pollutants, their sources and effects, and the related standards.

The Bay Area Air Quality Management District (BAAQMD) oversees air quality in the San Francisco Bay Area. BAAQMD prepares various plans (e.g., Clean Air Plan, Ozone Attainment Plan) that set forth the strategies and policies for the region to achieve and maintain compliance with the standards listed in Table 4. Its roles include the issuance of permits for stationary sources that emit pollutants, the development and oversight of pollutant reduction strategies, the monitoring of air quality, and the enforcement of air quality regulations.

BAAQMD also operates its Toxic Air Contaminant Control Program, which implements and enforces all Maximum Achievable Control Technology (MACT) standards and Airborne Toxic Control Measures (ATCMs) pertaining to the emission of such substances from stationary sources. This program also monitors the concentrations of toxic air contaminants at various locations in the Bay Area.

TABLE 4**MAJOR CRITERIA AIR POLLUTANTS AND STANDARDS**

	POLLUTANT					
	Ozone	Carbon Monoxide	Nitrogen Dioxide	Sulfur Dioxide	PM₁₀	PM_{2.5}
Health Effects	Eye irritation, respiratory function impairment	Aggravation of cardio-vascular disease, fatigue, headache, confusion, dizziness, can be fatal	Increased risk of acute and chronic respiratory disease	Aggravation of lung disease, increased risk of acute and chronic respiratory disease	Aggravation of chronic disease and heart/lung disease symptoms	Aggravation of chronic disease and heart/lung disease symptoms
Major Sources	Combustion sources, evaporation of solvents and fuels	Combustion of fuel, combustion of wood in stoves and fireplaces	Motor vehicle exhaust, industrial processes, fossil-fueled power plants	Diesel exhaust, oil-powered power plants, industrial processes	Combustion, cars, field burning, factories, unpaved roads, construction	Combustion, cars, field burning, factories, unpaved roads, construction
Federal Standard	1-hr: n/a 8-hr: .08 ppm	1-hr: 35 ppm 8-hr: 9 ppm	1-hr: n/a AA: .05 ppm	1-hr: n/a 24-hr: .14 ppm AA: .03 ppm	24-hr: 150 µg/m ³ AA: 50 µg/m ³	24-hr: 65 µg/m ³ AA: 15 µg/m ³
State Standard	1-hr: .09 ppm 8-hr: .07 ppm	1-hr: 20 ppm 8-hr: 9 ppm	1-hr: .25 ppm AA: n/a	1-hr: .25 ppm 24-hr: .04 ppm AA: n/a	24-hr: 50 µg/m ³ AA: 20 µg/m ³	24-hr: n/a AA: 12 µg/m ³
Bay Area Attainment Status	N	A	A	A	federal - A state - N	federal - A state - N

Attainment Status: A = attainment N = nonattainment

n/a = no standard established

PM₁₀ = particulate matter, 10 microns in size

PM_{2.5} = particulate matter, 2.5 microns in size

ppm = parts per million

µg/m³ = micrograms per cubic meter

AA = annual average

1-hr = 1-hour average

8-hr = 8-hour average

24-hr = 24-hour average

n/a = not applicable

Source: U.S. EPA, Bay Area Air Quality Management District, 2005.

2.5.2 Existing Air Quality

Despite the substantial growth of the Bay Area in recent decades, overall air quality has been improving. The improvement is primarily due to the implementation of measures that have reduced emissions from both stationary sources (e.g., factories, power plants, refineries, etc.) and mobile sources (e.g., automobiles, buses, trucks, aircraft, etc.). Complementing source-control measures are a variety of strategies, policies, and programs that are designed to improve air quality. These include programs to buy-back older automobiles and gasoline-powered lawnmowers, incentives for replacing older wood-burning stoves and fireplaces, incentives/subsidies for transit riders/carpoolers, incentives for purchasing low-emission products, Spare-the-Air campaigns, and local land uses policies that result in a reduction in the number/length of vehicle trips. The latter category includes locating jobs near housing, constructing mixed-use developments, and zoning land along rail corridors for higher densities.

As shown in Table 4, the Bay Area is designated as an “attainment area”, meaning the area meets the relevant standards, for carbon monoxide, nitrogen dioxide, and sulfur dioxide. The region is classified as a “nonattainment area” for both the federal and state ozone standards, although a request for reclassification to “attainment” of the federal standard is currently being considered by the U.S. EPA. The area does not meet the state standards for particulate matter.

2.5.3 Air Quality Impacts

Thresholds of Significance

For the purposes of this EIR, an air quality impact is considered significant if the project would:

- violate an ambient air quality standard or contribute substantially to an existing or project air quality violation; or
- result in substantial emissions or deterioration of ambient air quality; or
- create objectionable odors; or
- expose sensitive receptors or expose the general public to substantial levels of toxic air contaminants; or
- alter air movement, moisture, or temperature, or result in any change in climate either locally or regionally.

Air Quality Impacts

The proposed project will not affect long-term air quality because it will not generate new traffic and will not result in any increases in traffic congestion (see Section 2.1). Traffic volumes in the project area will be the same with or without the project, since unlike projects that construct new traffic lanes, this project will increase access yet not increase roadway capacity. **[No Impact]**

Short-term, construction-related air quality impacts will be negligible because 1) the area is paved and therefore the potential for dust generation will be limited, and 2) the project contractor will be required to comply with the City's standard dust control measures that are part of Section 35 of the Supplemental General Provisions for all City construction contracts. **[Less-than-Significant Impact]**

2.5.4 Mitigation and Avoidance Measures for Air Quality Impacts

The above analysis concluded that the proposed project would not result in any significant air quality impacts. Therefore, no mitigation or avoidance measures are required.

Conclusion: The project will not result in significant air quality impacts.

2.6 NOISE

The following discussion is based on a noise report prepared by MO'C Physics Applied in October 2004. A copy of the noise report is found in Appendix E.

2.6.1 Interpretation of Noise Levels and Standards

Noise is measured in "decibels" (dB), which is a numerical expression of sound levels on a logarithmic scale. A noise level that is ten dB higher than another noise level has ten times as much sound energy and is perceived as being twice as loud. Sounds less than 5 dB are just barely audible, and then only in the absence of other sounds. Intense sounds of 140 dB are so loud that they are painful and can cause damage with only brief exposure. These extremes are not commonplace in our normal working and living environments. An "A-weighted decibel" (dBA) filters out some of the low and high pitches that are not as audible to the human ear. Thus, noise impact analyses commonly use the dBA.

For traffic noise, ten times as many vehicles per hour results in ten times as much sound energy, resulting in a ten-decibel increase, and a perceived doubling of loudness. Twice as many vehicles per hour means twice the sound energy, resulting in a three-decibel increase, and a just-noticeable increase in loudness. Twenty-six percent more vehicles per hour means 26% more sound energy, resulting in a one-decibel increase, usually considered to be an imperceptible increase in loudness. The speed of traffic also affects noise levels: for every 5 mph increase in speed there is a 1 to 2-decibel increase in average noise levels.

Since excessive noise levels can adversely affect human activities (such as conversation and sleeping) and human health, Federal, State, and local governmental agencies have set forth criteria or planning

goals to minimize or avoid these effects. The noise guidelines are almost always expressed using one of several noise averaging methods such as Leq, Ldn, or CNEL.¹⁰ Using one of these descriptors is a way for a location's overall noise exposure to be measured, realizing of course that there are specific moments when noise levels are higher (e.g., when a jet is taking off from Moffett Field or a leafblower is operating) and specific moments when noise levels are lower (e.g., during lulls in traffic flows on Mathilda Avenue or in the middle of the night).

The State of California has published guidelines for noise compatible land use planning. Generally, exterior noise exposures fall into three categories: normally acceptable, conditionally acceptable, and unacceptable. The noise guidelines are expressed in terms of the Ldn. For residential, hotel, and motel land uses, normally acceptable noise levels are up to 60 dBA, conditionally acceptable noise level range between 60 dBA to 75 dBA, and unacceptable noise levels are 75 dBA and above. The City has not adopted the State guidelines but does consider them in land use planning.¹¹

2.6.2 Existing Noise Sources and Levels in the Project Area

The primary sources of noise in the immediate project area are motor vehicles and trains. Occasional aircraft overflights are a third source of noise.

Traffic on local roadways, especially Mathilda Avenue, produces noise levels of up to 75 dBA (peak-hour Leq) at nearby receptors. Depending upon the specific location, traffic-related noise exceeds the City's General Plan goal of having an outdoor Ldn no greater than 60 dBA at residences.

Trains running on the Caltrain tracks produce noise levels that are clearly audible over background levels. There are approximately 86 Caltrain passbys each weekday plus several daily freight trains.

Existing noise levels were sampled at six locations that are in proximity to the Mathilda Avenue bridge. The results of these measurements are shown in Table 5. The data in Table 5 indicate that some residences in the project area have existing noise levels in the “normally acceptable” range, while other residences are exposed to noise levels in the “conditionally acceptable” range, based upon the guidelines listed in the City’s General Plan.

¹⁰**Leq** stands for the Noise Equivalent Level and is a measurement of the average energy level intensity of noise over a given period of time such as the noisiest hour. **Ldn** stands for Day-Night Level and is a 24-hour average of noise levels, with 10-dB penalties applied to noise occurring between 10 PM and 7 AM. **CNEL** stands for Community Noise Equivalent Level; it is similar to the Ldn except that there are additional 5-dB penalties applied to noise which occurs between 7 PM and 10 PM. As a general rule of thumb where traffic noise predominates, the CNEL and Ldn are typically within 2 dBA of the peak-hour Leq.

¹¹Source: Noise Element of the *Sunnyvale General Plan*.

TABLE 5**MEASURED NOISE LEVELS [Leq]**

Location	Adjacent Land Use	Noise Level
SW corner of Charles/Evelyn intersection	single-family residence	68 dBA
SW corner of Charles/Evelyn parking lot	single-family residence	60 dBA
SE corner of Charles/Evelyn parking lot	apartments & single-family residence	62 dBA
West side of Agena Way	single-family residence	67 dBA
SE corner of Mathilda/California intersection	apartments	67 dBA
NE corner of Angel/Beemer intersection	single-family residence	57 dBA
Measurements were taken April 26-30, 2004.		
Source: MO'C Physics Applied, 2004.		

2.6.3 Noise Impacts**Thresholds of Significance**

For the purposes of this project, a noise impact is considered significant if the project would result in:

- exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or
- exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels; or
- a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or
- a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

CEQA does not define what noise level increase would be considered substantial. However, the City of Sunnyvale's *General Plan* defines a significant noise impact from new development on existing land uses as follows:

- If both the existing and post-project noise levels on the site are in the “normally acceptable” category, a project-caused noise increase of more than 5 dBA is significant.
- If the existing noise level on the site is in the “normally acceptable” category, but the post-project noise level on the site exceeds the “normally acceptable” category, a project-caused noise increase of more than 3 dBA is significant.
- If the existing noise level on the site exceeds the “normally acceptable” category, a project-caused noise increase of more than 3 dBA is significant.

Long-Term Noise Impacts

As described above, existing noise levels at many locations in the project area exceed the City's General Plan goal of having an outdoor Ldn no greater than 60 dBA at residences. The exceedances are principally caused by traffic on Mathilda Avenue, traffic on Evelyn Avenue, trains on the Caltrain tracks, or a combination of these.

The goal of the noise analysis, as required under CEQA, was to determine the effect of the proposed project on the existing noise environment. This task was accomplished through the use of the Federal Highway Administration's traffic noise model, which calculates traffic noise levels at adjacent receptors taking into account factors such as traffic volumes and speeds, roadway geometry, the elevations of roadways and receptors, and the distances between the traffic and the receptors.

Based on the modeling of future (Year 2020) traffic-related noise both with and without the Mathilda Avenue Bridge Rehabilitation project, the noise analysis concluded that project-related increases in noise would amount to - at most - one decibel at any given sensitive receptor (i.e., residence).¹² Such an increase would be unnoticeable as it generally takes a three-decibel increase in traffic noise to be noticeable. Further, such an increase would not be significant under the City's adopted thresholds, which are listed above. **[Less-than-Significant Impact]**

This conclusion is not unexpected since, with the exception of the southwest quadrant, the project is not moving traffic closer to adjacent residences. Further, the project will not increase traffic volumes over that which is projected to occur without the project. In the southwest quadrant, although there will be a new loop off-ramp, increases in noise would be unnoticeable because noise from traffic on the off-ramp would be mostly masked by pre-existing noise from traffic on Mathilda and Evelyn Avenues.

Short-Term Noise Impacts

The construction of the project will involve a wide variety of construction equipment for such tasks as earth hauling, excavating, contouring, grading and compacting of surfaces. Columns will be cast,

¹²Noise reports typically utilize future volumes so as to account for any increases in traffic that will occur due to planned growth in an area. This standard methodology is used to ensure that future noise levels are not underestimated, and that adequate mitigation - where warranted - is implemented.

surfaces will be paved, and steel members will be joined together. Most of the construction activities will involve the use of noise-generating diesel-powered heavy equipment such as dump trucks and bulldozers, concrete pumps, air compressors, cranes and generators. Most diesel-powered heavy construction equipment produces noise levels of 75 to 90 decibels when it is at a distance of 50 feet.

Noise levels decrease by 6 decibels for every doubling of the distance of separation from such localized sources. For example, barring obstructions, the noise levels from such a piece of equipment would be expected to be about 18 decibels less at a distance of 400 feet than at a distance of 50 feet, that is 57 to 72 decibels instead of 75 to 90 decibels.

Structural work, which typically lasts longer and involves more equipment than non-structural work, will be required for the widening of the Mathilda Avenue bridge, for the demolition of the existing off-ramp, the construction of the new loop off-ramp, and the reconstruction of the pedestrian crossings.

If the windows of those homes that would be most exposed to construction activities were to be open when the construction activities would be undertaken near them, then noise levels inside those homes would then be approximately 10 decibels less than the levels outdoors; at a distance of separation of 50 feet, the interior noise levels from the construction activities would be in the range of 65 to 80 decibels (or slightly higher whenever it would happen that more than one such piece of heavy equipment were to be used at the same time near the same place). With windows closed, the indoor noise levels at the same homes would be about 20 decibels less than the outdoor noise levels, or about 55 to 70 decibels. Such noise levels are highly intrusive in effect and can be expected to cause a considerable amount of annoyance. Speech is commonly conducted at levels of 60 to 65 decibels at the listener's ear. Thus, the estimated construction noise levels would at times cause a substantial amount of speech interference inside and outside of many of the residences that are thus situated. This situation applies to residences located in the southwest and northeast quadrants of the project.

Pile driving will likely be used during construction of the project. Pile drivers produce an impact noise each time the hammer strikes the pile (or the temporary cap on the top of the pile). The peak decibel levels during the sound impulses from pile drivers vary substantially according to the circumstances but often fall in the range of 95 to 105 decibels at a distance of 50 feet. Again, the diminution with increasing distance is about 6 decibels for every doubling of the distance of separation.

Thus, noise from construction activities is likely to constitute a temporary annoyance at residences located in the southwest and northeast quadrants. **[Significant Impact]**

Construction activities may also generate noticeable ground vibration at nearby residences, with pile driving being the construction source that could produce the greatest ground vibrations. **[Significant Impact]**

2.6.4 Mitigation and Avoidance Measures for Noise Impacts

The above analysis concluded that the proposed project would not result in any significant long-term noise impacts. Therefore, no mitigation or avoidance measures are required.

However, short-term noise impacts were determined to be significant. The project includes the following measures that will mitigate short-term noise impacts to a less-than-significant level:

- NOISE-1** Pile driving will be limited to the hours of 8 AM to 7 PM, Monday through Friday, with no pile driving on weekends or holidays.
- NOISE-2** Where practical, construction operations will be restricted to daytime hours of 7 AM to 7 PM with no construction activities on Sundays or holidays, to avoid the more sensitive evening and early morning hours. "Practical", as used here, means daytime construction can occur without creating major disruption and nighttime construction could avoid/minimize such disruption [e.g., the closure of lane(s) of traffic on primary highways with substantial volumes of daytime traffic]. This measure applies only at locations where there are adjacent sensitive receptors (e.g., residences).
- NOISE-3** Equipment will use available (i.e., standard) noise suppression devices and properly maintained mufflers. Construction noise can be reduced by using quiet or "new technology" equipment, particularly the quieting of exhaust noises by use of improved mufflers, and the use of such equipment is recommended. All internal combustion engines used at the project site will be equipped with the type of muffler recommended by the vehicle manufacturer. In addition, all equipment will be maintained in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train, and other components.
- NOISE-4** Staging of construction equipment and unnecessary idling of equipment within 200 feet of noise-sensitive land uses will be avoided whenever feasible. "Feasible", as used here, means that the implementation of this measure would not have a notable effect on construction operations or schedule.
- NOISE -5** Temporary walls/barriers/enclosures will be erected around stationary construction equipment when such equipment will be operated for an extensive period of time (i.e., more than 2-3 days) and where there are adjacent residences. Noise barrier walls and enclosures will contain absorptive material in order to prevent impacts upon other land uses due to noise reflection.
- NOISE-6** Notification shall be given to residents within 300 feet alerting them of planned construction activities, including the overall durations of the various construction stages and the schedule of pile driving activities. The notification shall also describe the noise

abatement measures that have been taken, as well as note the infeasibility of other measures that were considered but rejected.

Conclusion: The project will not result in significant long-term noise impacts. The project will, however, result in significant short-term noise impacts. Mitigation measures, which are included in the project, will reduce these impacts to a less-than-significant level.

2.7 CULTURAL RESOURCES

The following discussion is based upon an Archaeological Survey Report and a Historic Property Survey Report that was prepared for the project by Basin Research Associates. These reports contain sensitive information regarding the locations of archaeological resources and, therefore, are not included in the printed appendices to this EIR. The reports are, however, available for review by qualified personnel. Such requests for review can be made to the City's Department of Public Works located at 456 West Olive Avenue, Sunnyvale, during normal business hours.

2.7.1 Existing Conditions

As part of the preparation of this EIR, historic and archaeological research was conducted to determine if such resources are located within the project impact area and, if so, what impact the project would have (if any) upon them. The research included a review of existing reports and data, and evaluation of existing structures within the project impact area.

A prehistoric and historic site record and literature search by the California Historical Resources Information System, Northwest Information Center at Sonoma State University, revealed no known cultural resources within the project impact area. Further, a field reconnaissance of the project site revealed that no buildings, historic or otherwise, are present within the area to be impacted by the project. The existing Mathilda Avenue bridge structure, constructed in 1965, is not historic.

2.7.2 Cultural Resources Impacts

Thresholds of Significance

For this project, the thresholds of significance for cultural resources impacts are defined as follows:

- the project will cause a substantial adverse change in the significance of a historic resource as defined in CEQA Guidelines §15064.5; or

- the project will cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines §15064.5; or
- the project will directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- the project will disturb any human remains, including those interred outside of formal cemeteries.

Cultural Resources Impacts

As noted above, there are no historic, prehistoric, or other cultural resources located within the project impact area. Therefore, no cultural resources will be impacted by the project. **[No Impact]**

2.7.3 Mitigation and Avoidance Measures for Cultural Resources Impacts

The above analysis concluded that the proposed project would not result in any significant cultural resources impacts. Therefore, no mitigation or avoidance measures are required.

Conclusion: The project will not result in significant cultural resources impacts.

2.8 GEOLOGY

2.8.1 Existing Conditions

The project site is located in the Santa Clara Valley. The topography of the site and the surrounding area is relatively flat, with elevations decreasing as one moves in a south-to-north direction toward San Francisco Bay. The elevation in the immediate area ranges from approximately 80-90 feet above mean sea level (msl).

There are no fault zones located at or adjacent to the project site. The closest fault zone is the Monte Vista Fault, which is approximately four miles to the southwest. However, the Santa Clara Valley is characterized by frequent seismic activity related to movement on faults of the San Andreas system and related structures. These faults accommodate movement between the Pacific and North American tectonic plates. The area is in Zone 4 (most hazardous) on the Uniform Building Code's seismic Zone Map of the United States.

There are no geologic features in the project area (e.g., steep slopes) that would represent unusual constraints to the design of the proposed project.

2.8.2 Geologic Impacts

Thresholds of Significance

For the purposes of this project, a geologic impact is considered significant if the project would:

- expose people or structures to substantial adverse effects including the risk of loss, injury or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic related ground failure (including liquefaction), landslides, or expansive soil; or
- expose people or property to major geologic or soils hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques; or
- result in substantial soil erosion or the loss of top soils.

Geologic Impacts

As noted above, there are no geologic features in the project area that would represent unusual constraints to the design of the proposed project. Further, the project is not located within, or adjacent to, an active fault zone.

Due to its location in a seismically-active area, both the existing and widened Mathilda Avenue bridge will be subject to strong ground shaking in the event of a major earthquake on one of the region's active faults. This hazard is not unique to the project, but is present throughout the region.

The existing structure was seismically retrofitted in 1981 and 1993. The proposed modifications to the structure, including the new pedestrian/bicycle ramps, will be constructed in accordance with current seismic design criteria. Thus, while the effects of ground shaking cannot be avoided, the associated hazards will be reduced to a less-than-significant level by adherence to the applicable seismic design criteria. **[Less-than-Significant Impact]**

2.8.3 Mitigation and Avoidance Measures for Geologic Impacts

The above analysis concluded that the proposed project would not result in any significant geologic impacts. Therefore, no mitigation or avoidance measures are required.

Conclusion: The project will not result in significant geologic impacts.

2.9 BIOLOGICAL RESOURCES

2.9.1 Existing Conditions

The project is located in an urbanized area adjacent to downtown Sunnyvale. There are no sensitive ecological habitats (e.g., wetlands, creeks, oak woodlands, vernal pools, etc.) in the area. Existing vegetation consists of the many trees, primarily Canary Island Pines and Coast Redwoods, that are found along both sides of Mathilda Avenue, as well as trees along other streets and on other properties. These trees provide foraging and nesting habitat for a variety of birds commonly found throughout the urbanized areas of the Santa Clara Valley.

The existing trees are more fully described in Section 2.10, *Visual/Aesthetic Resources*.

2.9.2 Impacts to Biological Resources

Thresholds of Significance

For the purposes of this project, a biological resources impact is considered significant if the project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS; or
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG or USFWS; or
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; or
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; or
- conflict with any local ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impacts to Vegetation

As noted above, there are no sensitive ecological habitats in the area. Existing vegetation consists of trees and landscaping. The Sunnyvale Municipal Code (Section 19.94) defines a tree as "protected" if it is of "significant size", defined as having a circumference of 38 inches or greater, as measured at a height of four feet above the ground.

T A B L E 6				
TREES TO BE REMOVED BY THE PROJECT				
Number	Quadrant	Common Name	Scientific Name	Circumference
1	NW	Canary Island Pine	Pinus canariensis	50"
2	NW	Canary Island Pine	Pinus canariensis	57"
3	NW	Canary Island Pine	Pinus canariensis	50"
4	NW	Canary Island Pine	Pinus canariensis	44"
5	NW	Canary Island Pine	Pinus canariensis	57"
6	NW	Canary Island Pine	Pinus canariensis	44"
7	NW	Canary Island Pine	Pinus canariensis	44"
8	NW	Canary Island Pine	Pinus canariensis	38"
9	NW	Canary Island Pine	Pinus canariensis	50"
10	NW	Canary Island Pine	Pinus canariensis	50"
11	NW	Canary Island Pine	Pinus canariensis	13"
12	NW	Canary Island Pine	Pinus canariensis	57"
13	NW	Canary Island Pine	Pinus canariensis	50"
14	NW	Canary Island Pine	Pinus canariensis	44"
15	NW	Canary Island Pine	Pinus canariensis	13"
16	NW	Canary Island Pine	Pinus canariensis	50"
17	NW	Canary Island Pine	Pinus canariensis	50"
18	NW	Canary Island Pine	Pinus canariensis	25"
19	NW	Canary Island Pine	Pinus canariensis	25"
20	NW	Canary Island Pine	Pinus canariensis	44"
21	SW	Sweet Gum	Liquidambar	25"
22	SW	Sweet Gum	Liquidambar	38"
23	SW	Italian Stone Pine	Pinus pinea	88"
24	SW	Italian Stone Pine	Pinus pinea	75"
25	SW	Victorian Box	Pittosporum	50"
26	SE	Victorian Box	Pittosporum	38"
27	NE	Canary Island Pine	Pinus canariensis	75"
28	NE	Canary Island Pine	Pinus canariensis	44"
29	NE	Canary Island Pine	Pinus canariensis	66"
30	NE	Canary Island Pine	Pinus canariensis	63"
31	NE	Canary Island Pine	Pinus canariensis	57"
32	NE	Canary Island Pine	Pinus canariensis	50"
33	NE	Canary Island Pine	Pinus canariensis	38"
34	NE	Canary Island Pine	Pinus canariensis	50"
Bold Type indicates a Tree of Significant Size, as defined by the Sunnyvale Municipal Code.				

As shown in Table 6, the project will require the removal of approximately 34 trees. Of these 34 trees, 29 are protected under City ordinance due to their size. The removal of such trees is considered a significant biological impact. **[Significant Impact]**

Although many of the existing trees near the Mathilda Avenue bridge will be preserved, the proximity of the trees to the construction impact zone means that there is a substantial possibility that the trees could be accidentally damaged during construction. Such damage can result from over-pruning, root damage, root cutting, etc. If severe enough, the damage could lead to the death of such trees. **[Significant Impact]**

Impacts to Wildlife

The trees to be removed by the project provide suitable foraging and nesting habitat for raptors. Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both Federal and California laws and regulations. The Federal Migratory Bird Treaty Act makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird, including feathers, nests, and eggs. Disturbance of a nest that results in the abandonment or killing of eggs or young may be considered a "take". The California Fish & Game Code contains similar provisions that protect birds of prey.

If active nests are present during tree removal, harm to raptors would likely occur. This would be considered a significant impact. **[Significant Impact]**

The existing bridge and ramp structures may provide roosting habitat for Cliff Swallows or Barn Swallows, both of which are protected under the Migratory Bird Treaty Act. The project could potentially have significant impacts to nests of these species if any structures to which the nests are attached are demolished/modified, causing the loss of nests with eggs or young, or if construction occurs close enough to active nests to cause the abandonment of nests with young. **[Significant Impact]**

2.9.3 Mitigation and Avoidance Measures for Biological Impacts

The project includes the following measures that will either avoid or mitigate the above-described impacts to biological resources.

Mitigation for Loss of Trees

BIO-1 For each tree of "significant size" being removed by the project, replacement trees will be planted in the immediate project area. Locations for new trees will include both sides of Angel Avenue, the new parking area within the loop off-ramp, the bermed area on the outside of the loop off-ramp, and the median of Evelyn Avenue.

Tree Protection Mitigation

- BIO-2** The construction superintendent shall meet with the City Arborist before beginning work to discuss work procedures and tree protection.
- BIO-3** All trees to be retained shall be fenced to completely enclose the tree protection zone prior to demolition, grubbing, or grading. Fences shall be as approved by the City Arborist and are to remain until all grading and construction is completed.
- BIO 4** Trees to be preserved shall be pruned to clean the crown and to provide clearance. All pruning shall be completed or supervised by the City Arborist and adhere to the Best Management Practices for Pruning of the International Society of Arboriculture.
- BIO 5** No grading, construction, demolition or other work shall occur within the tree protection zone. Any modifications must be approved and monitored by the City Arborist.
- BIO 6** Any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, the City Arborist.
- BIO-7** Supplemental irrigation shall be applied as determined by the City Arborist.
- BIO-8** If injury should occur to any tree during construction, it shall be evaluated as soon as possible by the City Arborist so that appropriate treatments can be applied.
- BIO-9** No excess soil, chemicals, debris, equipment, or other materials shall be dumped or stored within the tree protection zone.
- BIO-10** Any additional tree pruning needed for clearance during construction must be performed or supervised by the City Arborist.

Mitigation for Potential Construction-Related Impacts to Nesting Raptors

- BIO-11** For construction activities that take place during the breeding season (i.e., January through August), preconstruction surveys for nesting raptors will be conducted by a qualified ornithologist to ensure that no raptor nests will be disturbed during project implementation. These surveys will be conducted no more than 14 days prior to the initiation of demolition/construction activities during the early part of the breeding season (January through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). During this survey, the ornithologist will inspect all trees in, and immediately adjacent to, the impact areas for raptor nests. If an active raptor nest is found close enough to the construction/demolition area to be disturbed by these activities, the ornithologist, in

consultation with CDFG, will determine the extent of a construction-free buffer zone, typically 250 feet, to be established around the nest.

Mitigation for Potential Construction-Related Impacts to Nesting Swallows

If it is not possible to schedule construction near the bridge to occur between September and mid-February, then the following procedures will be implemented as part of the project:

- BIO-12** Prior to February 15th, all old nests will be removed from the bridge/ramp structures before swallows return to the nesting site. Once the birds return, removal will be repeated at a frequency necessary to prevent nest completion or until project construction is complete.
- BIO-13** Preconstruction surveys for nesting swallows will be conducted to ensure that they are not utilizing areas to be disturbed during construction.
- BIO-14** Intact swallow nests are assumed to be occupied between February 15 and September 1. If preconstruction surveys find nesting swallows, it may be possible to obtain a permit to destroy occupied nests. If it is necessary to remove/destroy occupied swallow nests, a permit will be obtained from the USFWS Division of Animal Damage Control. Such a permit requires compelling justification that the work is essential to public safety. Any eggs removed from nests will require incubation by an approved wildlife rescue group.

Conclusion: The project will result in significant biological impacts. Mitigation measures, which are included in the project, will reduce these impacts to a less-than-significant level.

2.10 VISUAL/AESTHETIC RESOURCES

2.10.1 Existing Conditions

Photos 1 through 6 on the following pages depict various views of the project setting. Although the area is urbanized, there are a relatively large number of existing mature trees, especially along Mathilda

Photos 1 and 2

Photos 3 and 4

Photos 5 and 6

Avenue in the vicinity of Evelyn Avenue and the Caltrain tracks.¹³ These trees are considered to be an important visual/aesthetic resource, as noted in Sunnyvale's Downtown Program Update.

In the southeast quadrant (formed by the intersection of Mathilda Avenue and the Caltrain tracks), there is a stand of approximately six mature Canary Island Pine trees. These trees, which are located between the Mathilda Avenue bridge and Mathilda Place, have circumferences ranging from roughly 57-88 inches. The trees can be seen in Photo 2.

In the northeast quadrant, mature Canary Island Pine trees are located along the westside of Angel Avenue, adjacent to the eastside of the Mathilda Avenue bridge structure. These trees provide a substantial screening of the view of the Mathilda Avenue bridge from the adjacent neighborhood. The trees, which number approximately 17, have circumferences ranging from roughly 41-75 inches. Some of these trees are visible in Photo 4.

In the northwest quadrant, there are rows of Canary Island Pine and Coast Redwood trees along the westside of the Mathilda Avenue bridge structure, south of California Avenue. These trees line the existing pedestrian path, as shown in Photo 5. The row closest to the Mathilda Avenue bridge is comprised of 20 Canary Island Pine trees, with circumferences ranging from approximately 13-57 inches. Adjacent to, as well as south of, the Canary Island Pines are approximately 59 Coast Redwood trees with circumferences ranging from roughly 16-63 inches. There are also four Elm trees and one London Plane tree within this grouping of trees.

In the southwest quadrant, there are a number of Sweet Gum and Italian Stone Pine trees located along the edge of the Evelyn/Charles parking lot. These trees can be seen in Photo 6.

2.10.2 Visual/Aesthetic Impacts

Thresholds of Significance

For the purposes of this EIR, a visual/aesthetic impact is considered significant if the project would:

- have a substantial adverse effect on a scenic vista; or
- substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; or
- substantially degrade the existing visual character or quality of the site and its surroundings; or
- create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

¹³The City's Municipal Code (Section 19.94) defines a tree as any woody plant that has a circumference of 13 inches or more, as measured four feet above ground level. Trees with a circumference of 38 inches or greater are defined as "trees of significant size" and are accorded special protection.

Visual/Aesthetic Impacts due to Removal of Trees

As described in Section 2.10.1, the numerous trees located in the immediate vicinity of the existing Mathilda Avenue bridge are an important visual/aesthetic resource in the area. As such, a primary objective of the City in determining the design of the project has been to avoid impacts to trees to the greatest extent feasible. Various design options were evaluated, including shifting the widening from one side to the other and the narrowing of the median, so as to avoid trees. This effort led to the preservation of many - but not all - of the 250+ trees that are located adjacent to the Mathilda Avenue bridge. Trees to be removed are listed in Table 6 and are described below.

Tree Removal in the Northwest Quadrant: The bridge widening will require the removal of the 20 Canary Island Pine trees that are located along the westside of the existing Mathilda Avenue bridge, south of California Avenue. However, the two rows of Coast Redwood trees that are adjacent to these Canary Island Pines will be preserved. In addition, all of the Coast Redwood trees located south of the Canary Island Pines will be preserved. The four Elm trees and one London Plane tree will also be preserved. Thus, although the Canary Island Pines will be lost, the remaining 60+ trees will largely retain the visual screening of the Mathilda bridge from the adjacent Applied Signal Technology campus.

Tree Removal in the Southwest Quadrant: The new loop off-ramp from southbound Mathilda Avenue to Evelyn Avenue will require the removal of two Sweet Gum trees from the northerly part of the existing Charles/Evelyn parking lot. The new loop off-ramp will also necessitate the removal of two Italian Stone Pine trees along the east side of Charles Street. Finally, one Victorian Box tree adjacent to the Charles/Evelyn intersection will be removed.

Tree Removal in the Southeast Quadrant: The reconstruction of the existing pedestrian ramp will result in the removal of one Victorian Box tree located on the north side of Evelyn Avenue. All of the remaining trees in the southeast quadrant, including the six mature Canary Island Pine trees located between Mathilda Avenue and Mathilda Place, will be preserved.

Tree Removal in the Northeast Quadrant: The widening of the Mathilda Avenue bridge and the replacement of the existing pedestrian ramp will require the removal of eight Canary Island Pine trees. These trees are part of a row of approximately 17 Canary Island Pines that are located along the westside of Angel Avenue. The effect of the removal of these trees is that the Mathilda Avenue bridge structure will be more visible from the adjacent neighborhood than it is under existing conditions.

In light of the fact that existing trees adjacent to the Mathilda Avenue bridge are considered to be an important visual/aesthetic resource, the above-described removal of trees would constitute a significant visual and aesthetic impact. **[Significant Impact]**

Other Visual/Aesthetic Impacts

Other than the above-described removal of trees, the other visual/aesthetic-related effects of the project will be associated with the replacement of the existing off-ramp from southbound Mathilda Avenue to Evelyn Avenue and the replacement of the two pedestrian ramp structures. The demolition of the existing off-ramp to Evelyn Avenue from southbound Mathilda Avenue would be considered a beneficial visual/aesthetic impact. The replacement loop off-ramp would be visible from the nearby residences along Charles Avenue, but the change would not be significant in the context of the existing bridge structure and ramp. Similarly, the replacement pedestrian ramp structures would not represent a significant visual/aesthetic change in the context of the existing structures. **[Less-than-Significant Impact]**

2.10.3 Mitigation and Avoidance Measures for Visual/Aesthetic Impacts

As described in Section 1.3 (see pages 7-8), the project will incorporate various architectural and visual elements into the design of the bridge and ramps. Substantial landscaping and tree replacement will also be part of the project. The purposes of the landscaping and visual/aesthetic elements are 1) to enhance the area as a gateway to Downtown Sunnyvale, 2) to enhance the pedestrian environment, and 3) to provide mitigation for the visual impacts of the project.

The photo simulations on the following pages represent typical views of the project, with the proposed mitigation in place, as would be seen from nearby residential areas. Figure 6 depicts a view of the project from residences on Charles Avenue. Figure 7 provides a view from the neighborhood located in the northeast quadrant.

Figure 6 illustrates the effect of the berming and landscaping on the outside of the new loop off-ramp. The landscaping, which will include new Redwood trees will, combined with the berming and new trees within the loop ramp, soften the effect of the project on nearby residences.

Figure 7 depicts a view of project from the corner of Angel and Beemer Avenues. The new pedestrian structure can be seen, as well as the new Redwood trees. The Redwood trees, coupled with the new Goldenrain trees on the east side of Angel Avenue, are intended to mitigate for the loss of six existing Canary Island Pine trees that are adjacent to the existing pedestrian structure. All of the new trees will be relatively large (i.e., 48-inch box size) at the time of their planting to achieve a mature look quickly.

Conclusion: The project will result in significant adverse visual or aesthetic impacts. Mitigation measures, which are included in the project, will reduce these impacts to a less-than-significant level.

Figure 6

Figure 7

2.11 CUMULATIVE IMPACTS

2.11.1 Introduction

Cumulative impacts, as defined by CEQA, refer to two or more individual effects, which when combined, are considerable or which compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant projects taking place over a period of time. The CEQA Guidelines state (§15130) that an EIR should discuss cumulative impacts "when the project's incremental effect is cumulatively considerable." The discussion does not need to be in as great detail as is necessary for project impacts, but is to be "guided by the standards of practicality and reasonableness." The purpose of the cumulative analysis is to allow decision-makers to better understand the potential impacts which might result from approval of past, present and reasonably foreseeable future projects, in conjunction with the proposed project addressed in this EIR.

2.11.2 Analysis

Traffic: The traffic analysis contained in Section 2.1 utilizes the City's traffic forecasting model, which takes into account existing traffic, as well as any increases in traffic from future planned development. This methodology accounts for the effects of cumulative growth in the project area. The proposed project will not generate any new traffic and, therefore, would not contribute to the cumulative increase in traffic in the area.

Land Use: As noted in Section 2.2, the proposed project will not result in land use impacts. Therefore, by definition, there would be no cumulative land use impact since the project's contribution would be zero.

Flooding & Hydrology: As noted in Section 2.3, the proposed project will not result in flooding or hydrological impacts. Therefore, by definition, there would be no cumulative flooding/hydrology impact since the project's contribution would be zero.

Hazardous Materials: As noted in Section 2.4, the proposed project will not result in hazardous materials impacts. Therefore, by definition, there would be no cumulative hazardous materials impact since the project's contribution would be zero.

Air Quality: As noted in Section 2.5, the proposed project will not result in any long-term air quality impacts. Therefore, by definition, there would be no cumulative air quality impact since the project's contribution would be zero.

Noise: Over time, as the project area has become more urbanized and the City has grown, ambient noise levels have gradually increased. The largest sources of increased noise in the immediate project area are motor vehicle traffic and trains. Cumulative traffic-related noise will continue to increase as traffic

volumes increase (see Section 2.1). Cumulative railroad-generated noise will also continue to increase as Caltrain increases the number of daily trains. The Caltrain right-of-way has also been identified as a route for future high-speed trains which, if constructed, would further increase cumulative noise.

As noted in Section 2.6, the noise analysis concluded that project-related increases in noise would amount to - at most - one decibel at any given sensitive receptor (i.e., residence). Such an increase would be unnoticeable as it generally takes a three-decibel increase in traffic noise to be noticeable. Therefore, while the proposed project would incrementally contribute to increased noise, the project's contribution would not be cumulatively considerable.

Cultural Resources: As noted in Section 2.7, the proposed project will not result in cultural resources impacts. Therefore, by definition, there would be no cumulative cultural resources impact since the project's contribution would be zero.

Geology: The proposed project would be subject to strong groundshaking in the event of a major earthquake on one of the region's active faults. This is not unique to the project site, but applies throughout the greater Bay Area. All construction, including the proposed project, is required to address the effects of groundshaking through compliance with seismic safety design criteria. In this manner, a cumulatively significant impact is avoided.

Biology: Although the proposed project could result in impacts to nesting raptors and/or swallows (see Section 2.9), measures are incorporated into the project to avoid this impact. These measures are standard mitigation for all projects, the net effect of which is that cumulative impacts to nesting raptors and swallows are avoided.

The proposed project will result in the loss of approximately 34 trees, most of which are located on either side of the existing Mathilda Avenue bridge. These impacted trees are part of larger stands of trees. There are no planned or proposed projects that would impact any of the remaining trees within these stands.

Visual/Aesthetic: As described in Section 2.10, the proposed project would result in a significant visual and aesthetic impact due to the loss of mature trees, primarily in the northwest and northeast quadrants. The visual impact would be greatest in the neighborhood in the northeast quadrant because the eight Canary Island Pine trees being removed provide substantial screening of the Mathilda Avenue bridge structure from nearby residences. The eight trees being removed are part of a stand of 17 Canary Island Pine trees at this location. There are no planned or proposed projects that would impact any of the remaining trees within this stand.

SECTION 3. ALTERNATIVES

3.1 INTRODUCTION

CEQA Guidelines Section 15126.6 states, in part, that “an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project.”

As described in Section 1.2, the objectives of the project are to 1) rehabilitate the Mathilda Avenue bridge so that it meets current design standards and thereby improves operations and safety for motorists, pedestrians, and bicyclists; and 2) improve access to Downtown Sunnyvale.

ALTERNATIVES

- Purpose is to identify ways to mitigate or avoid significant effects of the project.
- Alternative(s) limited to those that would feasibly attain most of the project objectives.
- Discussion of infeasible or unreasonable alternatives is not required.
- Number of alternatives limited to a “reasonable range”.
- Alternatives must include the “No Project Alternative”.

With regard to the first objective, existing deficiencies include the following:

- There are no shoulders on the bridge.
- The sidewalk widths, barrier railings, and approach railings are inadequate.
- There is inadequate merging length between the ramp connectors and the main bridge.
- There is inadequate horizontal clearance between Evelyn Avenue and one of the columns that supports the Mathilda Avenue bridge. The column currently has no protective barrier due to insufficient clearance.
- The two pedestrian ramps do not meet the current Americans with Disabilities Act (ADA) design standards.

With regard to the second objective, it is currently difficult to access Downtown Sunnyvale from southbound Mathilda Avenue, especially during peak commute periods. Motorists heading to Downtown destinations must turn left at the Mathilda/Washington intersection. During peak commute periods, long queues in the left-turn lane can exceed the available capacity, a problem that is projected to worsen as the planned growth of the area is implemented.

Based on the analyses contained in Section 2, the proposed project will result in three significant impacts, all of which will be mitigated to a less-than-significant level by measures included in the project. These three impacts are as follows:

- ① ***Visual and Aesthetics***, due to the loss of existing trees, especially eight Canary Island Pines located in the northeast quadrant.

- ② **Biology**, due to the loss of 29 “trees of significant size” (as defined by City ordinance) and potential impacts to nesting raptors and/or swallows during construction.
- ③ **Construction Noise**, due to the use of heavy equipment (including pile driving) in the vicinity of residential areas.

The discussion that follows describes feasible and reasonable alternatives, if any, that would avoid one or more of these three impacts, while at the same time attaining most of the objectives of the project. As noted above, the No Project Alternative is also discussed.

3.2 NO PROJECT ALTERNATIVE

The No Project Alternative would result in no changes to the Mathilda Avenue bridge or to any nearby streets. The existing substandard off-ramp from southbound Mathilda Avenue to Evelyn Avenue would remain in place. No cul-de-sac would be constructed at the northerly end of Charles Avenue. The existing pedestrian ramps on the east side of the Mathilda Avenue bridge, which do not meet ADA standards, would remain unchanged. Evelyn Avenue would not be realigned to provide greater separation from one of the columns that support the Mathilda bridge. Finally, traffic circulation patterns would remain unchanged from existing conditions.

The No Project Alternative would avoid all of the environmental impacts, significant or otherwise, of the proposed project. No trees would be removed, visual and aesthetic effects would not occur, and disturbances related to increased noise during construction would be avoided.

To summarize, although the No Project Alternative would avoid all of the significant environmental effects of the project, it would not meet any of the project objectives.

3.3 WIDEN MATHILDA BRIDGE TO THE WEST ALTERNATIVE

This alternative would be similar to the proposed project design, except for the following: instead of the 25-foot bridge widening occurring on both sides existing bridge, all of the widening would be confined to the west side only. This alternative was considered during the design phase because, when compared to the proposed project design, it has the advantage of avoiding the biological and visual/aesthetic impacts associated with the loss of eight mature Canary Island Pine trees in the northeast quadrant along Angel Avenue.

However, by moving all of the widening to the west, the loss of trees on the west side would increase substantially as compared to the proposed project design. Whereas the proposed design would result in the loss of 20 mature Canary Island Pine trees located in the northwest quadrant south of California Street, tree loss would be increased to 80+ under this alternative. Specifically, the “widen to the west”

alternative would not only remove the 20 Canary Island Pine trees, but would also remove two adjacent rows of mature Coast Redwood trees (see Photo 5), four Elm trees, and one London Plane tree. The loss of these 80+ trees would be significant both biologically and aesthetically.

This alternative was also determined to be infeasible because it could not be constructed to comply with highway design standards. This statement is based on the fact that this alternative would require all of the traffic lanes on the bridge to be shifted to the west, which in turn would create what is known as a “broken back curve.” Such a curve would violate horizontal and vertical curve standards, would negatively affect design and travel speed, and would create a navigation hazard.

In conclusion, although this alternative would theoretically achieve all of the project objectives, it is not feasible from an engineering design and safety perspective. In addition, from an overall environmental impact perspective, this alternative is not superior to the proposed project design.

3.4 REDUCED CROSS-SECTION ALTERNATIVE

During the initial design phase, consideration was given to reducing the “footprint” of the project so as to minimize environmental impacts, specifically the loss of mature trees and impacts on nearby land uses. This technique, which is not uncommon in areas where there are existing constraints, typically involves reducing the width of various project features such as traffic lanes, medians, shoulders, pedestrian crossings, and/or sidewalks. While there is typically some flexibility in highway design standards, there are minimums below which facilities are deemed unsafe/substandard and therefore are infeasible.

In this case, due to the urbanized nature of the project setting, the proximity of residential areas, and the presence of numerous mature trees, the City directed that the proposed project design utilize reduced widths wherever feasible, while at the same time maintaining compliance with applicable safety and operational design criteria for both motorists and non-motorists. The proposed project design incorporates all such width-reduction features. In other words, the footprint of the proposed project design cannot be further reduced without violating American Association of State Highway & Transportation Officials (AASHTO) design standards for widths of traffic lanes, shoulders, and sidewalks.

In conclusion, it is not feasible to further reduce the cross-section of the proposed project design while, at the same time, maintaining compliance with current highway design criteria. Even if the City desired to implement a project that did not meet minimum design standards, such a project would not qualify for federal funding. As noted above, correcting existing design deficiencies is a primary goal of the proposed project.

3.5 REALIGN EVELYN AVENUE ALTERNATIVE

This alternative would consist solely of realigning Evelyn Avenue in the vicinity of Mathilda Avenue, which is a component of the proposed project design (see Figure 4). The horizontal realignment of Evelyn Avenue within the existing right-of-way would serve to correct one of the existing roadway design deficiencies, which is the inadequate horizontal clearance between Evelyn Avenue and one of the columns that supports the Mathilda Avenue bridge. The column currently has no protective barrier due to insufficient clearance. The cost for this alternative is estimated at \$442,000.

The Realign Evelyn Avenue Alternative would avoid the above-described three significant environmental impacts of the proposed project design. Specifically, there would be few (if any) trees impacted and construction-related noise impacts would be substantially less than under the proposed project design.

This alternative would, however, correct only one of the existing highway design deficiencies, namely the inadequate horizontal clearance between Evelyn Avenue and one of the columns that supports the Mathilda Avenue bridge. None of the other existing deficiencies (i.e., inadequate traffic lane and sidewalk widths, inadequate railings, insufficient merging lengths, and non-ADA-compliant pedestrian & bicycle ramps) would be corrected under this alternative. Finally, this alternative would not meet the second project objective, which is to improve access to Downtown Sunnyvale.

To summarize, while the Realign Evelyn Avenue Alternative would avoid the significant environmental impacts of the proposed project design, it would not attain most of the project objectives.

3.6 ROUNDABOUT ALTERNATIVE

This alternative would be a variation of the proposed project design. There are two primary differences between the proposed project design and the roundabout alternative:

- First, instead of replacing the existing substandard off-ramp from southbound Mathilda Avenue to Evelyn Avenue with a new loop off-ramp in the southwest quadrant, the roundabout alternative would replace the existing substandard off-ramp with a new standard off-ramp in the same general location (see Figure 8).
- Second, to facilitate the objective of improving access to Downtown Sunnyvale, this alternative would construct a roundabout on Evelyn Avenue at Pastoria Avenue. The roundabout would allow traffic on westbound Evelyn Avenue to more easily reverse direction and access Downtown than under existing conditions.

Figure 8

When compared to the proposed project design, an advantage of the Roundabout Alternative is that it avoids impacts to the existing 117-space parking lot located in the southwest quadrant. It also avoids the need to construct a cul-de-sac at the northerly end of Charles Avenue.

In terms of meeting the first project objective, which is to correct the existing safety and operational deficiencies, this alternative is comparable to the proposed project design. In terms of meeting the second project objective, which is improved access to the Downtown, this alternative is substantially inferior to the proposed project design. This statement is based on the fact that the roundabout alternative would still require drivers from southbound Mathilda Avenue to travel west on Evelyn Avenue (i.e., away from downtown) before reversing direction at the roundabout. This would not only be counter-intuitive, but would cause an increase on local neighborhood streets west of Mathilda Avenue. While the roundabout would be an improvement over existing conditions, it would not meet the “improved Downtown access” objective nearly as well as the proposed loop off-ramp in the southwest quadrant.

The Roundabout Alternative would not avoid any of the significant environmental impacts of the proposed project design. In fact, overall impacts to trees would be greater under the roundabout alternative because the number of trees to be removed in the northwest quadrant would increase by approximately 23 due to the need for a wider bridge footprint in the northwest quadrant to accommodate locating the deceleration lane farther to the north. [Note: Tree loss in the northeast quadrant would be the same under both the roundabout alternative and the proposed project design.]

The total estimated cost for the Roundabout Alternative (assuming a single-lane roundabout) is \$19 million versus \$14.4 million for the proposed project design.¹⁴

To summarize, the Roundabout Alternative would not avoid any of the significant environmental impacts of the proposed project design, would not improve access to Downtown Sunnyvale to the same degree as the proposed project design, and would cost \$4.6 million more than the proposed project design.

3.7 SEPARATE PEDESTRIAN OVERCROSSING ALTERNATIVE

This alternative would be a variation on the proposed project design with regard to the reconstruction of the existing pedestrian/bicycle ramps that are located on the east side of the bridge structure.. Instead of integrating the reconstructed ramps into the widened Mathilda Avenue bridge, a separate, stand-alone, pedestrian/bicycle overcrossing would be built. The new overcrossing, which is depicted in Figure 9, would be constructed immediately east of the widened Mathilda Avenue bridge. The new structure

¹⁴Source: “Conceptual Engineering Report for Mathilda Avenue at Evelyn”, Mark Thomas & Company, September 2003.

Figure 9

would have a width of approximately 10 feet and a maximum height of approximately 27 feet.¹⁵ The new overcrossing would also be ADA-compliant.

This alternative would meet all of the project objectives to the same degree as that which would be achieved by the proposed project design.

In terms of environmental impacts, when compared to the proposed project design, this alternative would avoid the need to remove eight mature Canary Island Pine that are located along the westside of Angel Avenue. None of the existing 17 Canary Island Pines would be impacted under this alternative. However, this alternative would locate a new structure in proximity to several existing residences on Angel Avenue, which would have adverse visual and privacy impacts. The residence at 360 Angel Avenue would be particularly affected because the new structure would be located less than 20 feet from the house, and users of the overcrossing would have direct views into the rear yard.

The total estimated cost for the Separate Pedestrian Overcrossing Alternative is \$15.5 million versus \$14.4 million for the proposed project design.

To summarize, the Separate Pedestrian Overcrossing Alternative would reduce the loss of trees associated with the proposed project design, but would result in increased visual and privacy impacts at certain residences. The Separate Pedestrian Overcrossing Alternative would meet the project objectives to the same degree as the proposed project design, but would cost \$1.1 million more than the proposed project design.

3.8 SEPARATE PEDESTRIAN UNDERCROSSING ALTERNATIVE

This alternative would be a variation on the proposed project design with regard to the reconstruction of the existing pedestrian/bicycle ramps that are located on the east side of the bridge structure. Instead of integrating the reconstructed ramps into the widened Mathilda Avenue bridge, a separate, stand-alone, pedestrian/bicycle undercrossing would be built. The new undercrossing, which is depicted in Figure 10, would be constructed east of the widened Mathilda Avenue bridge, just west of Sunnyvale Caltrain Station platform. Access to the northerly end of the undercrossing would be from Angel Avenue and would require a pathway within the Caltrain right-of-way.

Construction of the undercrossing would involve the excavation of a trench within the Caltrain right-of-way, perpendicular to the tracks. A concrete box (i.e., tunnel) would be cast-in-place in the trench and covered. The work would be done in phases so as to avoid disruption of Caltrain service. Construction

¹⁵This refers to the height of the structure. It does not include the height (roughly 10 feet) of the fencing that would be erected on both sides of the structure.

Figure 10

of temporary “shoofly” tracks would be required.¹⁶ Construction of the undercrossing would take approximately six months, with substantial nighttime work required so as to avoid impacts to Caltrain operations. Such restrictions are required by Caltrain as a condition of obtaining a permit for construction within the Caltrain right-of-way.

This alternative would meet all of the project objectives to the same degree as that which would be achieved by the proposed project design.

In terms of environmental impacts, when compared to the proposed project design, this alternative would avoid the need to remove eight mature Canary Island Pine that are located along the westside of Angel Avenue. None of the existing 17 Canary Island Pines would be impacted under this alternative. However, this alternative would require the removal of a large Coast Live Oak (*Quercus agrifolia*) tree that is located in the northerly portion of the Caltrain right-of-way. This tree has three main stems (i.e., trunks) with circumferences of 39, 56, and 60 inches, respectively.

This alternative would require a pedestrian pathway within the Caltrain right-of-way. It is unknown whether the PCJPB and/or the Public Utilities Commission would permit such a facility. The pathway could also potentially conflict with future additional tracks in this right-of-way, such as for the proposed California high-speed rail system.

As noted above, construction of this alternative would entail substantial nighttime work. The work would occur in proximity to existing residences. Therefore, the construction noise impacts of this alternative would be greater than that of the proposed project design.

The total estimated cost for the Separate Pedestrian Undercrossing Alternative is \$18.2 million versus \$14.4 million for the proposed project design.

To summarize, the Separate Pedestrian Undercrossing Alternative would reduce the loss of Canary Island Pine trees associated with the proposed project design, but would result in the loss of a large Coast Live Oak tree. When compared to the proposed project design, this alternative would have greater construction impacts. The Separate Pedestrian Undercrossing Alternative would meet the project objectives to the same degree as the proposed project design, but would cost \$3.8 million more than the proposed project design.

¹⁶Construction using the “bore-and-jack” method, whereby a tunnel is bored under the tracks, is not feasible at this location since there is insufficient room for the required bore pit.

SECTION 4. PUBLIC & INTERAGENCY SCOPING, COORDINATION, AND MEETINGS

Commencing in 2000, the City has provided ongoing opportunity for public input and comment on the Mathilda Avenue Bridge Rehabilitation Project, including the scope of this EIR. In addition, the City staff has prepared regular reports to keep the public and City Council aware of issues and progress on the project. The City's public involvement process for the project is summarized in Table 7.

T A B L E 7	
SUMMARY OF PROJECT'S PUBLIC INVOLVEMENT PROCESS	
Date of Meeting/Report	Description
12/19/2000	Report to City Council (information only)
April 2001	Bicycle Pedestrian Advisory Committee (BPAC) public hearing
10/16/2001	Report to City Council (public hearing)
01/15/2002	Downtown Stakeholders Committee Meeting
05/07/2002	Report to City Council (information only)
06/26/2002	Community Outreach Meeting
July 2002	Bicycle Pedestrian Advisory Committee (BPAC) public hearing
August 2002	Bicycle Pedestrian Advisory Committee (BPAC) public hearing
08/13/2002	Report to City Council (public hearing)
10/16/2002	Community Outreach Meeting
07/15/2003	Report to City Council (public hearing)
September 2003	Bicycle Pedestrian Advisory Committee (BPAC) public hearing
10/14/2003	Report to City Council (public hearing)
10/16/2003	Community Outreach Meeting
April 2004	Bicycle Pedestrian Advisory Committee (BPAC) public hearing
May 2004	Bicycle Pedestrian Advisory Committee (BPAC) public hearing
08/10/2004	Report to City Council (information only)
08/25/2004	Community Outreach Meeting
09/21/2004	Report to City Council (information only)
12/14/2004	Report to City Council (information only)
05/15/2005	City Council Study Session (public meeting)
07/19/2005	Report to City Council (public hearing)
01/10/2006	Community Outreach/EIR Scoping Meeting

The City also circulated a Notice of Preparation (NOP) from January 9 through February 7, 2006. A copy of the NOP is found in Appendix A. The NOP was sent to the State Clearinghouse, as well as to the Santa Clara Valley Transportation Authority (VTA), Peninsula Corridor Joint Powers Board, Santa Clara Valley Water District, and the City of Mountain View. One response to the NOP was received, a copy of which is found in Appendix B.

SECTION 5. REFERENCES

Basin Research Associates, **Cultural Resources Assessment for Mathilda Avenue Bridge Rehabilitation Project**, 2004.

Federal Emergency Management Agency, **Flood Insurance Rate Maps for the City of Sunnyvale**.

Fehr & Peers Associates, Inc., **Transportation Impact Analysis for the Mathilda Avenue Bridge Rehabilitation Project**, April 2004.

Geocon Associates, Inc., **Initial Site Assessment for Mathilda Avenue Bridge Rehabilitation Project**, March 2004.

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